

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-280-1
Relating to Certification of New Heavy-Duty Engines and Vehicles

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and Cummins Engine Company, Inc. and any modifications to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the following 2000 model-year Cummins Engine Company, Inc. diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG)

<u>Engine Family</u>	<u>Displacement</u>		<u>Exhaust Emission Control Systems and Special Features</u>
	<u>Liters</u>	<u>Cubic Inches</u>	
YCEXH0505CBJ (553F)	8.3	505	Turbocharger Charge Air Cooler Powertrain Control Module Heated Oxygen Sensor Oxidation Catalytic Converter

Engine models and codes are listed on attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP") for Heavy-Duty Diesel Engines (Title 13, California Code of Regulations, Section 1956.8):

	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
"FTP"	1.2	15.5	2.5	0.05

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulate Matter</u>
"FTP"	0.2	0.6	1.7	0.01

BE IT FURTHER RESOLVED: That the listed engine models are certified for use in urban buses.

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional lower-emission NOx standard pursuant to Title 13, California Code of Regulations, Section 1956.8(a)(1).

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2035 *et seq.*).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

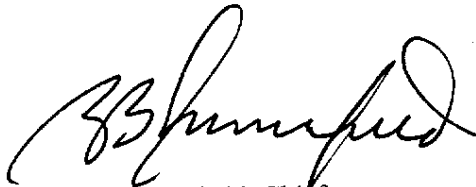
1. The Settlement Agreement is in effect.
2. The manufacturer is in compliance with all applicable certification requirements of the Settlement Agreement.

Engines certified under this Executive Order must conform to all applicable California emission regulations and to all applicable terms and conditions of the Settlement Agreement.

Executive Order A-21-280 issued on December 28, 1999, is hereby superseded by Executive Order A-21-280-1.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 27th day of April 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Supplementary Form

Manufacturer: Cummins Engine Company
 Engine category: On-highway HDDE
 EPA Engine Family: YCEXH0505CBB
 Mfr Family Name: 553F
 Process Code: New Submission

ATTACHMENT

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
2290;FR90304	C8.3-275G	275 @ 2400	na	na	750 @ 1400	na	na	H2OS,
2466;FR90270	C8.3-250G	250 @ 2400	na	na	750 @ 1400	na	na	PCM,OC
2466;FR90271	C8.3-250G	250 @ 2400	na	na	660 @ 1400	na	na	PCM,OC

A-21-280-1

Part Number Summary Form

Manufacturer: Cummins Engine Company
 Engine category: On-highway HDDE
 EPA Engine Family: YCEXH0505CBB
 Mfr Family Name: 553F
 Process Code: New Submission

ATTACHMENT

Engine Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Smoke Puff Limiter	Sensor Assemblies	
								Description	Part Number
2290;FR90304	C8.3-275G	NA	NA	3536348	3933559	3928277 (catalytic)	NA	Engine position	3078151
				3536354	3934683			sensor Mixer inlet	3080408
				3537511				pressure Coolant	3613547
				3537512				temperature Intake manifold	3865312
								temperature Oxygen sensor	3931711
2466;FR90270	C8.3-250G	NA	NA			3928277 (catalytic)	NA	Fuel flow sensor	3929935
								Speed sensor	3078152
				3536348	3933559			Engine position	3078151
				3536354	3934683			sensor Mixer inlet	3080408
				3537511				pressure Coolant	3613547
				3537512				temperature Intake manifold	3865312
								temperature Oxygen sensor	3931711
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2466;FR90271	C8.3-250G	NA	NA	3536348	3933559	3928277 (catalytic)	NA	sensor Mixer inlet	3080408
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A-21-280-1